

COURSE OBJECTIVES

MOD A

2-1 FIRE DEPARTMENT ORGANIZATION

- 2-1.1** Identify the organization of the fire department. (3-1.1.1)
- 2-1.2** Identify the firefighter's role as a member of the organization. (3-1.1.1)
- 2-1.3** Identify the mission of the fire service and of the local fire department. (3-1.1.1)
- 2-1.4** Identify the function of standard operating procedures. (3-2.1)
- 2-1.5** Identify the fire department's rules and regulations that apply to the position of firefighter. (3-1.1.1)
- 2-1.6** Identify the basic components of incident management and the firefighter's role within the local incident management system. (4-1.1.1, 4-1.1.2)
- 2-1.7** Identify the role of other agencies that may respond to emergencies. (3-1.1.1)
- 2-1.8.** Identify the components of a member assistance program. (3-1.1.1)
- 2-1.9** Identify all training resources, record keeping, and testing procedures as they apply to the firefighter. (3-1.1.1)

2-2 FIRE BEHAVIOR

- 2-2.1** Identify the following terms: (3-3.10)
 - 2-2.1.1** Fire/combustion
 - 2-2.1.2** Heat
 - 2-2.1.3** Ignition temperature
 - 2-2.1.4.** Flammable limits/flammable range
 - 2-2.1.5.** Vapor density
 - 2-2.1.6.** Solubility
- 2-2.2** Identify the components of the fire triangle and fire tetrahedron. (3-3.10)
- 2-2.3** Identify the relationship of the concentration of oxygen to combustibility and life safety. (3-3.1)
- 2-2.4** Identify four (4) products of combustion commonly found in structural fires that create a life hazard. (3-3.1)
- 2-2.5** Identify the three (3) methods of heat transfer. (3-3.9, 3-3.11)
- 2-2.6** Identify the Law of Heat Flow.
- 2-2.7** Identify the three (3) physical states of matter in which fuels are commonly found. (3-3.9)

- 2-2.8** Identify the following conditions and explain their associated hazards and appropriate actions: (3-3.10)
 - 2-2.8.1** Ignition/Incipient
 - 2-2.8.2** Growth/Freeburning
 - 2-2.8.3** Rollover/Flameover
 - 2-2.8.4** Flashover
 - 2-2.8.5** Fully developed
 - 2-2.8.6** Decay/Hot smoldering
 - 2-2.8.7** Backdraft
- 2-2.9** Identify the process of thermal layering that occurs in structural fires. (3-3.11)
- 2-2.10** Identify how to avoid disturbing the normal layering of heat.

2-3 SAFETY

- 2-3.1** Identify dangerous building conditions created by fire. (3-3.9, 3-3.11)
- 2-3.2** Identify the effects of the following items in a burning building: (3-3.9, 3-3.10, 3-3.11)
 - 2-3.2.1** Heat
 - 2-3.2.2** Smoke
 - 2-3.2.3** Water
- 2-3.3** Identify the term “building collapse”. (3-3.9, 3-3.11)
- 2-3.4** Identify hazards related to electrical emergencies. (3-3.17)
- 2-3.5** List the electrical emergencies that may be encountered. (3-3.17)
- 2-3.6** Identify the proper actions to take in the case of an electrical emergency. (3-3.17)
- 2-3.7** Identify the function of the following articles of protective equipment: (3-1.1.2, 3-3.1, 3-3.2)
 - 2-3.7.1** Helmet (with face shield)
 - 2-3.7.2** Hood
 - 2-3.7.3** Boots
 - 2-3.7.4** Gloves
 - 2-3.7.5** Protective coat
 - 2-3.7.6** Protective trousers
 - 2-3.7.7** PASS device
 - 2-3.7.8** Eye protection
 - 2-3.7.9** SCBA
 - 2-3.7.10** Hearing protection
- 2-3.8** Identify the care, inspection and maintenance of the protective clothing and equipment assigned or available for use. (3-1.1.2, 3-3.1, 3-3.2)
- 2-3.9** Identify the limitations of the protective clothing and equipment assigned or available for use.

- 2-3.10 Identify the types of accidents or injuries and their causes that occur in the following locations: (3-1.1.1, 4-1.1.1)
 - 2-3.10.1 Fireground
 - 2-3.10.2 Responding and returning
 - 2-3.10.3 Training
 - 2-3.10.4 Other on-duty locations (3-3.4, 4-4.2)
 - 2-3.10.5 Non-fire emergencies
- 2-3.11 Identify the safety procedures for ensuring a safe station/facility environment. (3-1.1.1, 4-1.1.1)
- 2-3.12 Identify the potential consequences of exposure to products of combustion. (3-3.10, 3-3.11)
- 2-3.13 Identify the elements of a personnel accountability system. (3-3.4)

Objectives 2-3.14 through 2-3.21 shall be met by the individual department or authority having jurisdiction, in accordance with currently accepted standards and practices, and appropriate for local equipment and/or procedures.

- 2-3.14* Describe the responsibilities of a fire department as required by NFPA1500, Standard on Fire Department Occupational Safety and Health Program and adopted by the authority having jurisdiction. (3-1.1.1)
- 2-3.15* **Demonstrate the techniques for action when you are personally trapped or disoriented in a fire situation or in a hostile environment. (3-1.1.1)**
- 2-3.16* **Demonstrate the donning and doffing of the protective equipment specified in 2-3.7. (3-1.1.1)**
- 2-3.17* **Demonstrate the use of seat belts, noise barriers, and other safety equipment provided for protection while riding on apparatus.**
- 2-3.18* **Demonstrate safety procedures when mounting, dismounting, and operating around fire apparatus. (3-3.16)**
- 2-3.19* **Demonstrate shutting off the utility services to a building. (3-3.4)**
- 2-3.20* **Demonstrate safety procedures when using fire service lighting equipment given the following (3-3.4)**
 - 2-3.20.1* **Power supply (portable or mounted)**
 - 2-3.20.2* **Lights**
 - 2-3.20.3* **Cords**
 - 2-3.20.4* **Connectors**
 - 2-3.20.5* **Ground-fault interrupter (GFI)**
- 2-3.21* **Demonstrate the use of an accountability system at an incident. (3-1.1.1)**

2-4 SELF-CONTAINED BREATHING APPARATUS

- 2-4.1** Identify the hazardous environments requiring the use of respiratory protection. (3-3.1)
- 2-4.2** Identify the physical requirements of a SCBA user. (3-3.1)
- 2-4.3** Identify the uses and limitations of SCBA. (3-3.1)
- 2-4.4** Identify each component and safety feature of SCBA. (3-3.1)
- 2-4.5** Identify the function of each component of SCBA. (3-3.1)
- 2-4.6** Identify the daily inspection procedures for the main components of SCBA per manufacturer's recommendations. (3-5.3)
- 2-4.7** Identify safety procedures to be used when wearing and working with SCBA to include: (3-3.1, 3-3.4, 3-3.8)
 - 2-4.7.1** General safety considerations
 - 2-4.7.2** Monitoring of firefighters entering hazardous situations
 - 2-4.7.3** Maintenance and storage operations
- 2-4.8** Identify the following emergency procedures to be used in the event of SCBA failure: (3-3.1(b))
 - 2-4.8.1** Use of emergency by-pass or purge valve
 - 2-4.8.2** Conservation of air
 - 2-4.8.3** Breathing from the breathing tube of regulator in the event of a facepiece failure
- 2-4.9** Identify the major components of a SCBA recharging system, giving purpose and operating principles. (3-5.3)
- 2-4.10** Identify rescue procedures for the following without compromising the rescuer's respiratory protection: (3-3.1(b), 3-3.4(b), 3-3.8(b))
 - 2-4.10.1** A firefighter with functioning respiratory protection
 - 2-4.10.2** A firefighter without functioning respiratory protection
 - 2-4.10.3** A civilian without respiratory protection
- 2-4.11** Identify the methods of donning and doffing of SCBA while wearing full protective equipment.
 - 2-4.11.1** Donning SCBA
 - 2-4.11.2** Doffing SCBA
- 2-4.12** **Demonstrate donning and doffing of SCBA while wearing full protective equipment: (3-3.1(b))**
 - 2-4.12.1** **Don and activate SCBA, within one minute, according to manufacturer's recommendations**
 - 2-4.12.2** **Doff SCBA according to manufacturer's recommendations**
- 2-4.13** **Demonstrate that the SCBA is in a safe condition for immediate use. (3-1.1.2, 3-3.1(b))**
- 2-4.14** **Demonstrate and document the cleaning and sanitizing of SCBA components. (3-5.3(b))**
- 2-4.15** **Demonstrate the daily inspection procedures for the main components of SCBA according to the manufacturer's recommendations. (3-5.3(b))**

- 2-4.16 Demonstrate the proper procedure for recharging air cylinders used by the fire department according to manufacturer's recommendations. (3-5.3(b))
 - 2-4.17 Demonstrate the use of all types of SCBA used by the fire department in conditions of obscured visibility. (3-3.1(b), 3-3.4(b))
 - 2-4.18 Demonstrate the following emergency procedures to be used in the event of SCBA failure: (3-3.1(b), 3-3.4(b))
 - 2-4.18.1 Use of the emergency by-pass or purge valve
 - 2-4.18.2 Conservation of air
 - 2-4.18.3 Breathing from the breathing tube or regulator in the event of a facepiece failure
 - 2-4.19 Demonstrate techniques for maximizing the air capacity of a SCBA under work conditions. (3-3.1(b), 3-3.4(b))
 - 2-4.20 Demonstrate air cylinder exchange while SCBA is being worn by a firefighter according to procedures discussed in class. (3-3.1(b), 3-3.4(b))
 - 2-4.21 Demonstrate air cylinder exchange while SCBA is NOT being worn by a firefighter according to procedures discussed in class. (3-3.1(b), 3-3.4(b))
 - 2-4.22 Demonstrate rescue procedures for the following without compromising the rescuer's respiratory protection: (3-3.1(b), 3-3.4(b), 3-3.8(b))
 - 2-4.22.1 A firefighter with functioning respiratory protection
 - 2-4.22.2 A firefighter without functioning respiratory protection
 - 2-4.22.3 A civilian without respiratory protection
 - 2-4.23 Demonstrate the use of SCBA in exiting through areas with restricted openings in emergency situations. (3-3.1(b), 3-3.9(b), 3-3.10(b))
- 2-5 PORTABLE FIRE EXTINGUISHERS**
- 2-5.1 Identify the classification and types of fire by symbols, pictures, and color-coding as they relate to portable extinguishers. (3-3.15)
 - 2-5.2 Identify the portable fire extinguisher rating system. (3-3.15)
 - 2-5.3 Identify the appropriate extinguishers and the application procedures for the various classes of fires when given a selection of extinguishers commonly carried on fire apparatus. (3-3.15)
 - 2-5.4 Identify the operation of all commonly available fire extinguishers and agents. (3-3.15)
 - 2-5.5 Identify common defects found during a visual inspection of fire extinguishers. (3-3.15)
 - 2-5.6 Demonstrate extinguishing the following classes of fires using the appropriate portable fire extinguisher: (3-3.15(b))
 - 2-5.6.1 Class A
 - 2-5.6.2 Class B

2-6 LADDERS

- 2-6.1** Identify, from pictures or actual ladders, the following types of ladders: (3-3.5)
 - 2-6.1** Folding/attic
 - 2-6.2** Roof
 - 2-6.3** Extension
 - 2-6.4** Straight/wall
 - 2-6.5** Aerial devices
- 2-6.2** Identify various components of ladders. (3-3.5)
- 2-6.3** Identify the use of each of the following types of ladders: (3-3.5)
 - 2-6.3.1** Folding/attic
 - 2-6.3.2** Roof
 - 2-6.3.3** Extension
 - 2-6.3.4** Straight/wall
 - 2-6.3.5** Aerial devices
- 2-6.4** Identify criteria to ensure safe ladder operation.
- 2-6.5** Identify the procedure for cleaning and maintaining the following types of ladders: (3-3.5)
 - 2-6.5.1** Folding/attic
 - 2-6.5.2** Roof
 - 2-6.5.3** Extension
 - 2-6.5.4** Straight/wall
 - 2-6.5.5** Aerial devices
- 2-6.6** Identify the inspection procedures for the following types of ladders: (3-3.5)
 - 2-6.6.1** Folding/attic
 - 2-6.6.2** Roof
 - 2-6.6.3** Extension
 - 2-6.6.4** Straight/wall
 - 2-6.6.5** Aerial devices
- 2-6.7** Identify the following firefighter carries using ground ladders: (3-3.5(b), 3-3.11(b))
 - 2-6.7.1** One-firefighter low-shoulder method
 - 2-6.7.2** One-firefighter high-shoulder method
 - 2-6.7.3** Two-firefighter low-shoulder method
 - 2-6.7.4** Three-firefighter flat-shoulder method
 - 2-6.7.5** Three-firefighter flat arm's length method
 - 2-6.7.6** Four-firefighter flat arm's length method
 - 2-6.7.7** Ladder placement for ventilation
 - 2-6.7.8** Ladder placement for rescue from a window
 - 2-6.7.9** Ladder placement for hose stream deployment

- 2-6.8 Identify positioning, raising, and lowering the following ground ladders for rescue, ventilation and hose deployment: (3-3.5, 3-3.8, 3-3.11)
 - 2-6.8.1 14-foot single or wall ladder
 - 2-6.8.2 24-foot extension ladder
 - 2-6.8.3 35-foot extension ladder
 - 2-6.8.4 Folding/attic ladder
- 2-6.9 Identify climbing the full length of each type of ground and aerial ladders available to the fire department. (3-3.5, 3-3.11)
- 2-6.10 Identify tool carries while ascending and descending ladders. (3-3.5, 3-3.11)
- 2-6.11 Identify the procedures for moving “injured” people down a ladder. (3-3.5, 3-3.8)
- 2-6.12 Identify the procedure for working off ladders using the appropriate safety devices and leg locks. (3-3.5, 3-3.11)
- 2-6.13 Identify the deployment of a roof ladder on a pitched roof. (3-3.5)
- 2-6.14 Identify the procedure for cleaning ladders (3-3.5)
- 2-6.15 Identify the inspection procedures for different types of ground and aerial ladders. (3-3.5)
- 2-6.16 Identify the maintenance procedures for different types of ground and aerial ladders. (3-3.5)
- 2-6.17 **Demonstrate the following firefighter carries using ground ladders: (3-3.5(b), 3-3.11(b))**
 - 2-6.17.1 One-firefighter low-shoulder method
 - 2-6.17.2 One-firefighter high-shoulder method
 - 2-6.17.3 Two-firefighter low-shoulder method
 - 2-6.17.4 Three-firefighter flat-shoulder method
 - 2-6.17.5 Three-firefighter flat arm’s length method
 - 2-6.17.6 Four-firefighter flat arm’s length method
 - 2-6.17.7 Ladder placement for ventilation
 - 2-6.17.8 Ladder placement for rescue from a window
 - 2-6.17.9 Ladder placement for hose stream deployment
- 2-6.18 **Demonstrate positioning, raising, and lowering the following ground ladders for rescue, ventilation and hose deployment: (3-3.5(b), 3-3.8(b), 3-3.11(b))**
 - 2-6.18.1 14-foot single or wall ladder
 - 2-6.18.2 24-foot extension ladder
 - 2-6.18.3 35-foot extension ladder
 - 2-6.18.4 Folding/attic ladder
- 2-6.19 **Demonstrate climbing the full length of each type of ground and aerial ladders available to the fire department. (3-3.5(b), 3-3.11(b))**
- 2-6.20 **Demonstrate tool carries while ascending and descending ladders. (3-3.5(b), 3-3.1(b))**
- 2-6.21 **Demonstrate moving “injured” people down a ladder. (3-3.5(b), 3-3.8(b))**

- 2-6.22 Demonstrate working off ladders using appropriate safety devices and leg locks. (3-3.5(b), 3-3.11(b))
- 2-6.23 Demonstrate the deployment of a roof ladder on a pitched roof. (3-3.5(b))
- 2-6.24 Demonstrate the procedure for cleaning ladders. (3-3.5(b))
- 2-6.25 Demonstrate the inspection procedures for different types of ground and aerial ladders. (3-3.5(b))
- 2-6.26 Demonstrate maintenance procedures for different types of ground and aerial ladders. (3-3.5(b))
- 2-7 FIRE HOSE AND APPLIANCES
 - 2-7.1 Identify the construction features of hose. (3-3.7, 3-3.9)
 - 2-7.2 Identify the types of fire hose. (3-3.7, 3-3.9)
 - 2-7.3 Identify the types of fire hose damages and their prevention (3-5.4)
 - 2-7.4 Identify the construction features of fire hose couplings. (3-5.4)
 - 2-7.5 Identify the uses of hose rolls (3-3.7, 3-5.4)
 - 2-7.6 Identify the difference between a forward and reverse hose lay. (3-5.4)
 - 2-7.7 Identify precautions to be followed while advancing hose lines to a fire. (3-3.9)
 - 2-7.8 Identify different types of hose rolls (3-3.7, 3-5.4)
 - 2-7.8.1 Straight roll
 - 2-7.8.2 Donut roll
 - 2-7.8.3 Twin donut roll
 - 2-7.8.4 Self-locking twin donut roll
 - 2-7.9 Identify different types of coupling and uncoupling procedures. (3-3.9, 3-3.12, 3-3.14)
 - 2-7.9.1 Hose coupling: Foot tilt method
 - 2-7.9.2 Hose coupling: Two- firefighter method
 - 2-7.9.3 Hose uncoupling: Knee press method
 - 2-7.9.4 Hose uncoupling: Two-firefighter method
 - 2-7.10 Identify different types of hose carries (3-3.9, 3-3.12, 3-3.14)
 - 2-7.10.1 Hose carry
 - 2-7.10.2 Hose carry/drag
 - 2-7.10.3 Hose drag/carry
 - 2-7.11 Identify different types of loading hose loads or finishes (3-3.9, 3-3.12, 3-3.14)
 - 2-7.11.1 Accordion load
 - 2-7.11.2 Horseshoe load
 - 2-7.11.3 Flat load
 - 2-7.11.4 Reverse horseshoe load
 - 2-7.11.5 Straight finish
 - 2-7.11.6 Minuteman load
 - 2-7.11.7 Triple layer load

- 2-7.12** Identify different types of unloading hose loads or finishes (3-3.9, 3-3.12, 3-3.14)
 - 2-7.12.1** Pulling a non-pre-connected wyed hose
 - 2-7.12.2** Pulling a pre-connected hoseline flat loaded
 - 2-7.12.3** Pulling a pre-connected hoseline minuteman loaded
 - 2-7.12.4** Pulling a pre-connected hoseline triple layer loaded
- 2-7.13** Identify the procedures for lengthening a hose line using a hose clamp (3-3.9, 3-3.12, 3-3.14)
- 2-7.14** Identify the procedures for lengthening a hose line using a break apart nozzle. (3-3.9, 3-3.12, 3-3.14)
- 2-7.15** Identify the procedure for replacing a section of hose using (3-3.9, 3-3.12, 3-3.14)
 - 2-7.15.1** Kink method
 - 2-7.15.2** Clamp method
- 2-7.16** Identify the use of hose and appliances on a pumper as required to be carried by NFPA1901, Standard for Pumper Fire Apparatus, Section 7-2. (3-3.3)
- 2-7.17** Identify the procedures for advancing uncharged attack lines from a pumper. (3-3.9, 3-3.12)
 - 2-7.17.1** Into a structure
 - 2-7.17.2** Up a ladder to a second floor landing
 - 2-7.17.3** Up an inside stairway to an upper floor
 - 2-7.17.4** Up an outside stairway to an upper floor
 - 2-7.17.5** Down an inside stairway to a lower floor
 - 2-7.17.6** Down an outside stairway to a lower floor
 - 2-7.17.7** To an upper floor by hoisting
- 2-7.18** Identify the procedures for advancing charged attack lines from a pumper. (3-3.9)
 - 2-7.18.1** Into a structure
 - 2-7.18.2** Up a ladder to a second floor landing
 - 2-7.18.3** Up an inside stairway to an upper floor
 - 2-7.18.4** Up an outside stairway to an upper floor
 - 2-7.18.5** Down an inside stairway to a lower floor
 - 2-7.18.6** Down an outside stairway to a lower floor
 - 2-7.18.7** To an upper floor by hoisting
- 2-7.19** Identify the procedure for operating a charged attack line from a ladder.(3-3.9)
- 2-7.20** Identify the procedure for carrying a 100-foot attack line into a building, connecting it to a standpipe, and advancing the line from the standpipe. (3-3.12)
- 2-7.21** Identify the proper procedure for making hydrant connections with the following type intake hose: (3-3.14)
 - 2-7.21.1** 3 inch or smaller intake line
 - 2-7.21.2** 4½ inch or smaller soft sleeve
 - 2-7.21.3** 4½ inch or larger intake line

- 2-7.22 Identify the procedure to hand lay 300 feet of supply line (2 ½ inch or larger) from a pumper to a water source. (3-3.14)
- 2-7.23 Identify the procedure for cleaning and maintaining fire hose. (3-5.4)
- 2-7.24 Identify the procedure for cleaning and maintaining couplings. (3-5.4)
- 2-7.25 Identify the procedure for inspecting couplings for damage (3-5.4)
- 2-7.24 **Demonstrate three (3) types of hose rolls, given fire hose (minimum of 1½ inches) and water supply (minimum 2½ inches) used for fire attack: (3-3.7(b), 3-5.4(b))**
 - 2-7.24.1 **Straight roll**
 - 2-7.24.2 **Donut roll**
 - 2-7.24.3 **Twin donut roll**
 - 2-7.24.4 **Self-locking twin donut roll**
- 2-7.25 **Demonstrate one coupling and two uncoupling procedures, given fire hose used for fire attack (minimum of 1½ inches) and water supply (minimum 2½ inches): (3-3.9(b), 3-3.12(b), 3-3.14(b))**
 - 2-7.25.1 **Hose coupling: Foot tilt method**
 - 2-7.25.2 **Hose coupling: Two - firefighter method**
 - 2-7.25.3 **Hose uncoupling: Knee press method**
 - 2-7.25.4 **Hose uncoupling: Two-firefighter method**
- 2-7.26 **Demonstrate two hose carries, given fire hose used for fire attack (minimum 1½ inches): (3-3.9(b), 3-3.12(b), 3-3.14(b))**
 - 2-7.26.1 **Hose carry**
 - 2-7.26.2 **Hose carry/drag**
 - 2-7.26.3 **Hose drag/carry**
- 2-7.27 **Demonstrate the loading of three hose loads or finishes, given fire hose used for water supply (minimum 2½ inches): (3-3.9(b), 3-3.12(b), 3-3.14(b))**
 - 2-7.27.1 **Accordion load**
 - 2-7.27.2 **Horseshoe load**
 - 2-7.27.3 **Flat load**
 - 2-7.27.4 **Reverse horseshoe load**
 - 2-7.27.5 **Straight finish**
 - 2-7.27.6 **Minuteman load**
 - 2-7.27.7 **Triple layer load**
- 2-7.28 **Demonstrate the unloading of three hose loads or finishes, given fire hose used for fire attach (minimum of 1½ inches) and for water supply (minimum 2½ inches): (3-3.9(b), 3-3.12(b), 3-3.14(b))**
 - 2-7.28.1 **Pulling a non-pre-connected wyed hose**
 - 2-7.28.2 **Pulling a pre-connected hoseline flat loaded**
 - 2-7.28.3 **Pulling a pre-connected hoseline minuteman loaded**
 - 2-7.28.4 **Pulling a pre-connected hoseline triple layer loaded**
- 2-7.29 **Demonstrate the procedures for lengthening a line using a hose clamp, given fire hose used for water supply (minimum 2½ inches). (3-3.9(b), 3-3.12(b), 3-3.14(b))**

- 2-7.30 Demonstrate the procedures for lengthening a line using a break-apart nozzle, given fire hose used for fire attack (2½ inches minimum). (3-3.9(b), 3-3.12(b), 3-3.14(b))
- 2-7.31 Demonstrate the procedures for replacing a section of hose using the kink OR clamp method, given a fire hose used for fire attack (minimum 1½ inches): (3-3.9(b), 3-3.12(b), 3-3.14(b))
 - 2-7.31.1 Kink Method
 - 2-7.31.2 Clamp Method
- 2-7.32 Demonstrate the use of hose appliances and tools on a pumper as required to be carried by Section 7-2, NFPA 1901, Standard for Pumper Fire Apparatus. (3-3.3(b))
- 2-7.33 Demonstrate advancing uncharged attack lines of two different sizes (1½ inches or larger), from a pumper given the necessary equipment and operating as a member of a team for the following evolutions: (3-3.9(b), 3-3.12(b))
 - 2-7.33.1 Into a structure
 - 2-7.33.2 Up a ladder to a second floor landing
 - 2-7.33.3 Up an inside stairway to an upper floor
 - 2-7.33.4 Up an outside stairway to an upper floor
 - 2-7.33.5 Down an inside stairway to a lower floor
 - 2-7.33.6 Down an outside stairway to a lower floor
 - 2-7.33.7 To an upper floor by hoisting
- 2-7.34 Demonstrate advancing charged attack lines of two different sizes (1½ inches or larger) from a pumper given the necessary equipment and operating as a member of a team for the following evolutions: (3-3.9(b))
 - 2-7.34.1 Into a structure
 - 2-7.34.2 Up a ladder to a second floor landing
 - 2-7.34.3 Up an inside stairway to an upper floor
 - 2-7.34.4 Up an outside stairway to an upper floor
 - 2-7.34.5 Down an inside stairway to a lower floor
 - 2-7.34.6 Down an outside stairway to a lower floor
 - 2-7.34.7 To an upper floor by hoisting
- 2-7.35 Demonstrate operation of a charged attack line (1½ inches or larger) from a ground ladder. (3-3.9(b))
- 2-7.36 Demonstrate carrying a 100-foot attack line (1½ inches or larger) into a building, connecting it to a standpipe, and advancing the line from the standpipe. (3-3.12(b))
- 2-7.37 Demonstrate the proper procedure for making hydrant connections with the following type intake hose: (3-3.14(b))
 - 2-7.37.1 3 inch or smaller intake line
 - 2-7.37.2 4½ inch or larger soft sleeve
 - 2-7.37.3 4½ inch or larger hard intake line
- 2-7.38 Demonstrate a hand lay of 300 feet of supply line (2½ inch or larger) from a pumper to a water source. (3-3.14(b))

- 2-7.39 Demonstrate the procedure for cleaning and maintaining fire hose. (3-5.4(b))**
- 2-7.40 Demonstrate the procedures for cleaning and maintaining couplings. (3-5.4(b))**
- 2-7.41 Demonstrate the procedures for inspecting couplings for damage. (3-5.4(b))**

MOD B

2-8 EMERGENCY MEDICAL CARE (2-3)

Authority having jurisdiction (AHJ) must retain proof of completion of objectives satisfying objectives listed below. The required practical completion may be indicated on the practical key that remains in the fire department training jacket of the individual.

The objectives may be accomplished by completing courses hosted by:

American Red Cross: Basic First Aid
 American Red Cross: First Responder
 American Heart Association: CPR only
 Illinois Department of Public Health, (ONE ONLY OF THE FOLLOWING): EMT-B, EMT-D, EMT-I, EMT-P
 National Safety Council: Basic First Aid

- 2-8.1 Identify the principles of infection control and universal blood and body fluid precautions as prescribed for public safety officers.**
- 2-8.2 Identify the use, decontamination, disinfection, and disposal of personal protective equipment used for protection from infection.**
- 2-8.3 Identify the following procedures as defined in the American Heart Association or American Red Cross CPR manuals:**
 - 2-8.3.1 Adult single-rescuer CPR.**
 - 2-8.3.2 Child single-rescuer CPR.**
 - 2-8.3.3 Infant single-rescuer CPR.**
 - 2-8.3.4 Adult two-rescuer CPR.**
 - 2-8.3.5 Management of an obstructed airway in a conscious adult.**
 - 2-8.3.6 Management of an obstructed airway in an unconscious adult.**
 - 2-8.3.7 Management of an obstructed airway in a conscious child.**
 - 2-8.3.8 Management of an obstructed airway in an unconscious child.**
 - 2-8.3.9 Management of an obstructed airway in a conscious infant.**
 - 2-8.3.10 Management of an obstructed airway in an unconscious infant.**
- 2-8.4 Identify a primary survey for life-threatening injuries**
- 2-8.5 Identify the characteristics of three types of external bleeding.**
- 2-8.6 Identify three procedures for controlling external bleeding**
- 2-8.7 Identify signs and symptoms of traumatic shock.**

- 2-8.8 Identify the emergency medical care for a victim of traumatic shock.
- 2-8.9 Identify the characteristics of thermal burns according to degree and severity.
- 2-8.10 Identify the emergency medical care of thermal burns according to degree and severity.
- 2-8.11 Identify the signs and symptoms of ingested poisons and drug overdose.
- 2-8.12 Identify the method of contacting the poison control center that serves the department.
- 2-8.13 Identify the emergency medical care for victims of ingested poisons and drug overdoses
- 2-8.14 Identify the signs and symptoms of a fracture.
- 2-8.15 Identify the emergency medical care for fracture.
- 2-8.16 Identify the use of a resuscitation mask in the performance of single- and two-rescuer CPR.
- 2-8.17 **Demonstrate the emergency medical care of thermal burns according to degree and severity.**
- 2-8.18 **Demonstrate the use, decontamination, disinfection, and disposal of personal protective equipment used for protection from infection.**
- 2-8.19 **Demonstrate the following procedures as defined in the American Heart Association or American Red Cross CPR manuals:**
 - 2-8.19.1 **Adult single-rescuer CPR.**
 - 2-8.19.2 **Child single-rescuer CPR.**
 - 2-8.19.3 **Infant single-rescuer CPR.**
 - 2-8.19.4 **Adult two-rescuer CPR.**
 - 2-8.19.5 **Management of an obstructed airway in a conscious adult.**
 - 2-8.19.6 **Management of an obstructed airway in an unconscious adult.**
 - 2-8.19.7 **Management of an obstructed airway in a conscious child.**
 - 2-8.19.8 **Management of an obstructed airway in an unconscious child.**
 - 2-8.19.9 **Management of an obstructed airway in a conscious infant.**
 - 2-8.19.10 **Management of an obstructed airway in an unconscious infant.**
- 2-8.20 **Demonstrate the use of a resuscitation mask in the performance of single- and two -rescuer CPR.**
- 2-8.21 **Demonstrate a primary survey for life-threatening injuries.**
- 2-8.22 **Demonstrate three procedures for controlling external bleeding.**
- 2-8.23 **Demonstrate the emergency medical care for a victim of traumatic shock.**

- 2-8.24 Demonstrate the emergency medical care for victims of ingested poisons and drug overdoses.**
- 2-8.25 Demonstrate the emergency medical care for a fracture.**
- 2-9 Building Construction**
 - 2-9.1** Identify the basic structural characteristics of the following types of building construction: (3-3.11)
 - 2-9.1.1** Fire resistive (Type I)
 - 2-9.1.2** Noncombustible (Type II)
 - 2-9.1.3** Ordinary (Type III)
 - 2-9.1.4** Heavy timber (Type IV)
 - 2-9.1.5** Wood frame (Type V)
 - 2-9.2** Identify the two basic types of light wood framing.
 - 2-9.2.1** Balloon framing
 - 2-9.2.2** Platform framing
 - 2-9.3** Identify the main components of lightweight framing construction.
 - 2-9.3.1** Footing
 - 2-9.3.2** Foundation
 - 2-9.3.3** Plate
 - 2-9.3.4** Stud
 - 2-9.3.5** Joist
 - 2-9.3.6** Rafter
 - 2-9.3.7** Sill
 - 2-9.3.8** Header
 - 2-9.3.9** Ridge Board
 - 2-9.3.10** Eave
 - 2-9.3.11** Fascia
 - 2-9.3.12** Soffit
 - 2-9.3.13** Interior finish
 - 2-9.3.13.1** Plaster
 - 2-9.3.13.2** Drywall
 - 2-9.3.14** Exterior finish
 - 2-9.3.14.1** Brick Veneer
 - 2-9.3.14.2** Sheathing
 - 2-9.4** Identify the three, broadly classified, categories of roofs from a firefighting standpoint.
 - 2-9.4.1** Flat roofs
 - 2-9.4.2** Pitched roofs
 - 2-9.4.3** Curved roofs
 - 2-9.5** Identify Structural Components of large structural systems.
 - 2-9.5.1** Beams
 - 2-9.5.2** Columns
 - 2-9.5.3** Arches
 - 2-9.5.4** Cables
 - 2-9.5.5** Truss

- 2-9.6** Identify the components of Truss construction.
 - 2-9.6.1** Chords
 - 2-9.6.2** Web or Diagonal members
 - 2-9.6.3** Gusset Plate
- 2-9.7** Identify three (3) hazards associated with truss and lightweight construction. (3-3.11)
- 2-9.8** Identify dangerous conditions created by a fire and fire suppression activities. (3-3.9, 3-3.11)
- 2-9.9** Identify the term “building collapse”. (3-3.9, 3-3.11)
- 2-9.10** Identify five (5) indicators of building collapse. (3-3.9, 3-3.11)
- 2-9.11** Identify the effects of fire and fire suppression activities on the following building materials. (3-3.9, 3-3.11)
 - 2-9.11.1** Wood
 - 2-9.11.2** Masonry
 - 2-9.11.3** Cast Iron
 - 2-9.11.4** Steel
 - 2-9.11.5** Reinforced concrete
 - 2-9.11.6** Gypsum wallboard
 - 2-9.11.7** Glass
 - 2-9.11.8** Plaster on lath
- 2-9.12** Identify the following terms as they relate to building construction: (3-3.11)
 - 2-9.12.1** Load-bearing wall
 - 2-9.12.2** Non-load-bearing wall
 - 2-9.12.3** Party wall
 - 2-9.12.4** Fire wall
 - 2-9.12.5** Partition wall
 - 2-9.12.6** Cantilever or unsupported wall
 - 2-9.12.7** Parapet wall
- 2-9.13** Identify the effects of the following items in a burning building: (3-3.9, 3-3.11)
 - 2-9.13.1** Intense heat
 - 2-9.13.2** Dense smoke
 - 2-9.13.3** Large volume of water poured into and on the structure

2-10 FORCIBLE ENTRY

- 2-10.1** Identify types, materials and construction features of doors. (3-3.3)
- 2-10.2** Identify types, materials and construction features of windows. (3-3.3, 3-3.10)
- 2-10.3** Identify types, materials and construction features of floors. (3-3.10, 3-3.11)
- 2-10.4** Identify materials and construction features of vertical barriers. (3-3.3)
- 2-10.5** Identify the procedures to use in forcing /opening the following components: (3-3.3, 3-3.7, 3-3.10, 3-3.11, 3-3.12, 3-5.3)
 - 2-10.5.1** Doors
 - 2-10.5.2** Windows
 - 2-10.5.3** Floors
 - 2-10.5.4** Vertical barriers
- 2-10.6** Identify the construction materials of door and window locking devices. (3-3.3)
- 2-10.7** Identify the procedures of through-the-lock entry for doors and windows. (3-3.3)
- 2-10.8** Identify methods and procedures for cleaning, maintaining and inspecting hand tools used for forcible entry. (3-3.3)
- 2-10.9** **Demonstrate proper selection and safely carry at least one of the following: (3-3.3(b))**
 - 2-10.9.1** Cutting tool
 - 2-10.9.2** Prying tool
 - 2-10.9.3** Pushing/pulling tool
 - 2-10.9.4** Striking tool
- 2-10.10** **Demonstrate forcing entry through each of the following: (3-3.3(b), 3-3.12(b))**
 - 2-10.10.1** Doors
 - 2-10.10.2** Windows
 - 2-10.10.3** Floors
 - 2-10.10.4** Vertical barriers
- 2-10.11** **Demonstrate the procedures of through-the-lock entry for doors. (3-3.10(b))**
- 2-10.12** **Demonstrate proper methods and procedures for cleaning, maintaining and inspecting a selected tool used for forcible entry. (3-3.3(b), 3-3.7(b), 3-3.10(b), 3-5.4 (b))**

2-11 VENTILATION

- 2-11.1** Identify the definition and principles of ventilation and the considerations of proper ventilation. (3-3.10)
- 2-11.2** Identify the safety considerations and precautions to be taken while ventilating a structure. (3-3.10, 3-3.11)

- 2-11.3 Identify the advantages and disadvantages of the following types of ventilation:
 - 2-11.3.1 Vertical (3-3.11)
 - 2-11.3.2 Horizontal (3-3.10)
 - 2-11.3.3 Trench/strip (3-3.11)
 - 2-11.3.4 Mechanical (3-3.10)
 - 2-11.3.5 Mechanical pressurization/positive pressure ventilation (3-3.10)
 - 2-11.3.6 Hydraulic (3-3.10)
- 2-11.4 Identify the signs, causes and effects of backdraft explosions. (3-3.10)
- 2-11.5 Identify methods of preventing a backdraft explosion. (3-3.10)
- 2-11.6 Identify the characteristics of the following roof types: (3-3.10, 3-3.11)
 - 2-11.6.1 Flat
 - 2-11.6.2 Shed
 - 2-11.6.3 Pitched
 - 2-11.6.4 Arched
- 2-11.7 Identify the types of tools used during ventilation. (3-3.10)
- 2-11.8 Identify the necessary precautions when ventilating the following roof types:
 - 2-11.8.1 Flat
 - 2-11.8.2 Shed
 - 2-11.8.3 Pitched
 - 2-11.8.4 Arched
- 2-11.9 Identify the procedures for the types of ventilation referred to in 2-11.3. (3-3.10, 3-3.11)
 - 2-11.9.1 Vertical (3-3.11)
 - 2-11.9.2 Horizontal (3-3.10)
 - 2-11.9.3 Trench/strip (3-3.11)
 - 2-11.9.4 Mechanical (3-3.10)
 - 2-11.9.5 Mechanical pressurization/positive pressure ventilation (3-3.10)
 - 2-11.9.6 Hydraulic (3-3.10)
- 2-11.10 Identify how the following factors are used to determine the integrity of a roof system: (3-3.10, 3-3.11)
 - 2-11.10.1 Construction
 - 2-11.10.2 Visual observation
 - 2-11.10.3 Elapsed time of fire
- 2-11.11 Identify the procedures for opening various types of windows from inside and outside with the use of tools. (3-3.10)
- 2-11.12 Identify the procedures for opening various types of windows from inside and outside without the use of tools. (3-3.10)
- 2-11.13 Identify the procedures for breaking window or door glass and removing obstructions. (3-3.10)
- 2-11.14 Identify ventilation using water fog. (3-3.10, 3-3.11)
- 2-11.15 **Demonstrate opening various types of windows from inside and outside with the use of tools. (3-3.10(b))**

- 2-11.16 **Demonstrate opening various types of windows from inside and outside without the use of tools. (3-3.10(b))**
- 2-11.17 **Demonstrate breaking window or door glass and removing obstructions. (3-3.10(b))**
- 2-11.18 **Demonstrate the removal of skylights, scuttle covers, and other roof openings. (3-3.10(b))**
- 2-11.19 **Demonstrate ventilation using water fog. (3-3.10(b), -3.3.11(b))**
- 2-11.20 **Demonstrate determining the integrity of a roof system by sounding. (3.3.11(b))**
- 2-11.21 **Demonstrate the ventilation of a flat roof using both hand tools and power tools. (3.3.11(b))**
- 2-11.22 **Demonstrate the ventilation of a pitched roof using both hand tools and power tools. (3.3.11(b))**
- 2-11.23 **Demonstrate floor ventilation procedures. (3.3.11(b))**
- 2-11.24 **Demonstrate the use of positive pressure ventilation. (3-3.11(b))**

- 2-12 **Water Supply**
 - 2-12.1 Identify the guidelines to follow when deploying a portable water tank. (3-3.14)
 - 2-12.2 Identify the equipment necessary for the transfer of water between portable water tanks. (3-3.14)
 - 2-12.3 Identify the guidelines to follow when loading and offloading tankers/tenders on mobile water supply apparatus. (3-3.14)
 - 2-12.4 Identify the water distribution system and other water sources in the local community. (3-3.14)
 - 2-12.5 Identify the following parts of a water distribution system: (3-3.14)
 - 2-12.5.1 Primary feeders
 - 2-12.5.2 Secondary feeders
 - 2-12.5.3 Distributors
 - 2-12.6 Identify the operation of the following: (3-3.14)
 - 2-12.6.1 Dry barrel hydrant
 - 2-12.6.2 Wet barrel hydrant
 - 2-12.6.3 Dry hydrant
 - 2-12.7 Identify how the following conditions reduce hydrant effectiveness: (3-3.14)
 - 2-12.7.1 Obstructions to use of hydrants
 - 2-12.7.2 Direction of hydrant outlets to suitability of use
 - 2-12.7.3 Mechanical damage
 - 2-12.7.4 Rust and corrosion
 - 2-12.7.5 Failure to open the hydrant fully
 - 2-12.7.6 Susceptibility to freezing
 - 2-12.8 Identify apparatus, equipment, and appliances required to provide water at rural locations by relay pumping. (3-3.14)
 - 2-12.9 Identify apparatus, equipment, and appliances required to provide water at rural locations by a mobile water supply apparatus shuttle. (3-3.14)

- 2-12.10 Identify the procedure for connecting a supply hose to a hydrant and fully open and close the hydrant. (3-3.14)
 - 2-12.11 Identify the procedure for hydrant to pumper hose connections for forward and reverse hose lays. (3-3.14)
 - 2-12.12 Identify the procedure assembling and connecting the equipment necessary for drafting from a static water supply source. (3-3.14)
 - 2-12.13 Identify the procedure for the deployment of a portable water tank. (3-3.14)
 - 2-12.14 Identify the procedure for assembling the equipment necessary for the transfer of water between portable tanks. (3-3.14)
 - 2-12.15 **Demonstrate connecting a supply hose to a hydrant and fully open and close the hydrant. (3-3.14(b))**
 - 2-12.16 **Demonstrate hydrant to pumper hose connections for forward and reverse hose lays. (3-3.14(b))**
 - 2-12.17 **Demonstrate assembling and connecting the equipment necessary for drafting from a static water supply source. (3-3.14(b))**
 - 2-12.18 **Demonstrate the deployment of a portable water tank. (3-3.14(b))**
 - 2-12.19 **Demonstrate assembling the equipment necessary for the transfer of water between portable tanks. (3-3.14(b))**
- 2-13 Nozzles and Fire Streams**
- 2-13.1 Identify a fire stream. (3-3.7)
 - 2-13.2 Identify the purposes of a fire stream. (3-3.7)
 - 2-13.3 Identify the advantages of using water as an extinguishing agent. (3-3.7)
 - 2-13.4 Identify the disadvantages of using water as an extinguishing agent. (3-3.7)
 - 2-13.5 Identify three (3) major types of fire stream patterns. (3-3.6, 3-3.9)
 - 2-13.6 Identify three (3) sizes of fire streams. (3-3.6, 3-3.9)
 - 2-13.7 Identify the design of the three- (3) major types of fire stream nozzles and tips. (3-3.6, 3-3.9)
 - 2-13.8 Identify the required nozzle pressure of fire streams. (3-3.6, 3-3.9)
 - 2-13.9 Identify the major parts of a fog nozzle. (3-3.7)
 - 2-13.10 Identify the water flow through various types of fog nozzles. (4-3.1)
 - 2-13.11 Identify the operation of fire stream nozzles. (3-3.6, 3-3.9)
 - 2-13.12 Identify the nozzle pressure effects and the flow capabilities of fire stream nozzles. (3-3.9)
 - 2-13.13 Identify nozzle reaction. (3-3.6, 3-3.9)
 - 2-13.14 Identify water hammer and one method of its prevention. (3-3.9)
 - 2-13.15 Identify three (3) observable results that are obtained when the proper application of a fire stream is accomplished. (3-3.9)
 - 2-13.16 Identify the safe procedures in the handling of fire hose and associated equipment. (3-3.9)
 - 2-13.17 Identify methods of preventing damage to a nozzle and associated equipment. (3-3.9)
 - 2-13.18 Identify the types of ground cover fires. (3-3.8)

- 2-13.19 Identify the procedures for extinguishing ground cover fires. (3-3.8)
- 2-13.20 Identify the principles of foam as an extinguishing agent (3-3.15)
- 2-13.21 Identify the equipment necessary for foam application. (3-3.15)
- 2-13.22 Identify the following methods of water application (3-3.7)
 - 2-13.22.1 Direct
 - 2-13.22.2 Indirect
 - 2-13.22.3 Combination
- 2-13.23 Identify the use of nozzles carried on a pumper as required by Section 3-8 of NFPA1901, Standard for Automotive Fire Apparatus, 1996 ed. (3-3.9)
 - 2-13.23.1 Open and close a fog nozzle
 - 2-13.23.2 Adjust the stream pattern on a fog nozzle
 - 2-13.23.3 Adjust the flow setting on an adjustable gallonage fog nozzle
 - 2-13.23.4 Open and close a solid stream nozzle
- 2-13.24 Identify the use of adapters carried on a pumper as required by Section 3-8 of NFPA1901, Standard for Automotive Fire Apparatus.
- 2-13.25 Identify the procedures for inspecting nozzles for damage. (3-3.6, 3-3.9)
- 2-13.26 Identify the procedures for cleaning and maintaining nozzles. (3-3.6, 3-3.9)
- 2-13.27 Identify the procedures for extinguishing or controlling the following live fires working as a member of a team and using appropriate protective equipment, firefighting tools, and extinguishing agents:
 - 2-13.27.1 Piles/stacks of Class A combustible materials (exterior)
 - 2-13.27.2 Open pans for combustible liquids (exterior)
 - 2-13.27.3 Vehicle fires
 - 2-13.27.4 Storage containers (exterior dumpster/trash bin)
 - 2-13.27.5 Class A combustible materials within a structure (interior attack)
 - 2-13.27.6 A hidden fire within a structure
 - 2-13.27.7 Ground cover fire
- 2-13.28 Identify assembling the components of a foam fire stream. (3-3.15)
- 2-13.29 Identify the application technique of Class B foam (3-3.15)
- 2-13.30 **Demonstrate the following methods of water application: (3-3.7(b), 3-3.9(b))**
 - 2-13.30.1 Direct
 - 2-13.30.2 Indirect
 - 2-13.30.3 Combination

- 2-13.31 Demonstrate the use of nozzles carried on a pumper as required by Section 3-8 of NFPA1901, Standard for Automotive Fire Apparatus, 1996 ed. (3-3.9(b))
 - 2-13.31.1 Open and close a fog nozzle
 - 2-13.31.2 Adjust the stream pattern on a fog nozzle
 - 2-13.31.3 Adjust the flow setting on an adjustable gallonage fog nozzle
 - 2-13.31.4 Open and close a solid stream nozzle
- 2-13.32 Demonstrate the use of adapters carried on a pumper as required by Section 3-8 of NFPA1901, Standard for Automotive Fire Apparatus.
- 2-13.33 Demonstrate the procedures for inspecting nozzles for damage. (3-3.6(b), 3-3.9(b))
- 2-13.34 Demonstrate the procedures for cleaning and maintaining nozzles. (3-3.6(b), 3-3.9(b))
- 2-13.35 Demonstrate extinguishing or controlling the following live fires working as a member of a team and using appropriate protective equipment, firefighting tools, and extinguishing agents:
 - 2-13.35.1 Piles/stacks of Class A combustible materials (exterior)
 - 2-13.35.2 Open pans for combustible liquids (exterior)
 - 2-13.35.3 Vehicle fires
 - 2-13.35.4 Storage containers (exterior dumpster/trash bin)
 - 2-13.35.5 Class A combustible materials within a structure (interior attack)
 - 2-13.35.6 A hidden fire within a structure
 - 2-13.35.7 Ground cover fire
- 2-13.36 Demonstrate assembling the components of a foam fire stream. (3-3.15)
- 2-13.37 Demonstrate application technique of Class B foam (3-3.15)
- 2-14 RESCUE
 - 2-14.1 Identify the procedures for a primary and secondary search under fire conditions. (3-3.8)
 - 2-14.2 Identify the need for Technical Rescue Awareness training as presented in class.
 - 2-14.3 Identify requirements according to the OSHA 29 CFR 1910.146 and NFPA1670, Operations and Training for Technical Rescue Incidents:
 - 2-14.4 Identify the basic hand and power tools generally used for vehicular extrication.
 - 2-14.5 Identify assessment of vehicular rescue situations
 - 2-14.6 Identify primary and secondary room search procedures under fire conditions using a rope or hose line. (3-3.4, 3-3.8)
 - 2-14.7 Identify primary and secondary room search under fire conditions without using a rope or hose line. (3-3.8)
 - 2-14.8 Identify the removal of injured persons from an immediate hazard by the use of carries. (3-3.8)

- 2-14.9 Identify the removal of injured persons from an immediate hazard by the use of drags. (3-3.8)
- 2-14.10 **Demonstrate primary and secondary room search procedures under fire conditions using a rope or hose line. (3-3.4(b), 3-3.8(b))**
- 2-14.11 **Demonstrate primary and secondary room search under fire conditions without using a rope or hose line. (3-3.8(b))**
- 2-14.12 **Demonstrate the removal of injured persons from an immediate hazard by the use of carries. (3-3.8(b))**
- 2-14.13 **Demonstrate the removal of injured persons from an immediate hazard by the use of drags. (3-3.8(b))**
- 2-15 FIRE CONTROL**
 - 2-15.1 Identify the considerations for fire stream selection. (3-3.7, 3-3.9)
 - 2-15.2 Identify the considerations and technique for a direct attack. (3-3.7, 3-3.9)
 - 2-15.3 Identify the considerations and technique for an indirect attack. (3-3.7, 3-3.9)
 - 2-15.4 Identify the considerations and technique for a combination attack. (3-3.7, 3-3.9)
 - 2-15.5 Identify the fire conditions that require a master stream including: (3-3.7, 3-3.9)
 - 2-15.6 Identify key fire control factors for extinguishing or controlling a Class B fire: (4-3.3)
 - 2-15.6.1 Open area flammable/combustible fires
 - 2-15.6.2 Pressure vessels
 - 2-15.6.3 Tank trucks
 - 2-15.6.4 Utility/pipe lines
 - 2-15.7 Identify the advantages and disadvantages of water when used as an extinguishing agent on Class B fires. (4-3.3)
 - 2-15.8 Identify the factors to consider when extinguishing a Class C fire. (3-3.17)
 - 2-15.9 Identify the dangers in extinguishing a Class D fire. (3-3.17)
 - 2-15.10 Identify the tactical components (assignments) for structural firefighting: (3-3.6, 3-3.9, 3-3.18)
 - 2-15.10.1 First due engine company
 - 2-15.10.2 Second due engine company
 - 2-15.10.3 Truck/rescue company
 - 2-15.11 Identify the function of a rapid intervention crew. (3-3.6, 3-3.9, 3-3.18)
 - 2-15.12 Identify the role of the Incident Commander. (3-3.6, 3-3.9, 3-3.18)
 - 2-15.13 Identify the considerations for extinguishing fires in the following: (3-3.6, 3-3.9, 3-3.18)
 - 2-15.13.1 Upper level fires
 - 2-15.13.2 Below grade fires
 - 2-15.13.3 Vehicle fires
 - 2-15.13.4 Trash containers

- 2-15.14 Identify the basic steps to follow for emergencies in confined enclosures. (3-3.6, 3-3.9, 3-3.18)
- 2-15.15 Identify the term “wild fire”. (3-3.6, 3-3.9, 3-3.18)
- 2-15.16 Identify the factors affecting wildland fires: (3-3.6, 3-3.9, 3-3.18)
 - 2-15.16.1 Fuel
 - 2-15.16.2 Weather
 - 2-15.16.3 Topography
- 2-15.17 Identify the procedures for attacking wildland fires. (3-3.17)
- 2-15.18 **Demonstrate shutting off the following utility services to a building: (3-3.17(b))**
 - 2-15.18.1 Electrical
 - 2-15.18.2 Natural gas
 - 2-15.18.3 LP gas
 - 2-15.18.4 Fuel oil
 - 2-15.18.5 Domestic water

MOD C

2-16 ROPES AND KNOTS

- 2-16.1 Identify the difference between life safety and utility ropes. (3-1.1.1)
- 2-16.2 Identify types of rope construction (3-1.1.1, 3-1.1.2)
- 2-16.3 Identify the following knots, their uses, and how they are constructed: (3-1.1.1, 3-1.1.2)
 - 2-16.3.1 Bowline
 - 2-16.3.2 Clove hitch
 - 2-16.3.3 Figure of eight on a bight
 - 2-16.3.4 Becket or sheet bend
 - 2-16.3.5 Overhand safety
 - 2-16.3.6 Half hitch
 - 2-16.3.7 Figure of eight follow through
- 2-16.4 Identify the procedures for using a rope to tie ladders, hose and other objects to secure them. (3-3.11)
- 2-16.5 Identify the reasons for placing a rope out of service. (3-1.1.1)
- 2-16.6 Identify the method of marking a rope to remove it from service according to manufacturer’s recommendations. (3-1.1.1)
- 2-16.7 **Demonstrate tying the following knots, given the proper rope, and hoisting any selected forcible entry tool, pike, pole/hook ground ladder, hose line, extinguisher, or appliance to a height of at least twelve (12) feet: (3-1.1.1(b), 3-1.1.2(b))**
 - 2-16.7.1 Bowline
 - 2-16.7.2 Clove hitch
 - 2-16.7.3 Figure of eight on a bight
 - 2-16.7.4 Becket or sheet bend
 - 2-16.7.5 Overhand safety knot
 - 2-16.7.6 Half hitch
 - 2-16.7.7 Figure of eight follow through

- 2-16.8 Demonstrate the proper techniques for inspecting rope for the following: (3-5.3(b))**
 - 2-16.8.1 Chemical damage**
 - 2-16.8.2 Cuts and abrasions**
 - 2-16.8.3 Internal damage**
 - 2-16.8.4 Mildew and rot**
 - 2-16.8.5 Stretch**
 - 2-16.8.6 Thermal damage**
- 2-16.9 Demonstrate the proper cleaning and maintenance of rope.**
- 2-16.10 Demonstrate the appropriate method(s) of rope storage.**
- 2-16.11 Demonstrate using a rope to tie ladders, hose and other objects to secure them. (3-3.11(b))**

2-17 LOSS CONTROL

Salvage

- 2-17.1 Identify the purpose of salvage and its value to the public and fire department. (3-3.13, 3-5.3)**
- 2-17.2 Identify the benefits of salvage. (3-3.13, 3-5.3)**
- 2-17.3 Identify the considerations for planning salvage work (3-3.13, 3-5.3)**
- 2-17.4 Identify the construction and uses of the following:(3-3.13, 3-5.3)**
 - 2-17.4.1 Water chute**
 - 2-17.4.2 Catchall**
 - 2-17.4.3 Carryall**
 - 2-17.4.4 Salvage covers (to remove debris)**
- 2-17.5 Identify the procedures for the covering or closing of building openings, including doors, windows, floors, and roofs. (3-3.13, 3-5.3)**
- 2-17.6 Identify two (2) folds and rolls for salvage covers. (3-3.13, 3-5.3)**
- 2-17.7 Identify two (2) methods of deploying salvage covers to cover property. (3-3.13, 3-5.3)**
- 2-17.8 Demonstrate two folds and rolls for salvage covers. (3-3.13(b), 3-5.3(b))**
- 2-17.9 Demonstrate two methods of deploying salvage covers to cover property. (3-3.13(b), 3-5.3(b))**
- 2-17.10 Demonstrate the construction and use of a water chute. (3-3.13(b), 3-5.3(b))**
- 2-17.11 Demonstrate the construction and use of a water catchall. (3-3.13(b), 3-5.3(b))**
- 2-17.12 Demonstrate the covering or closing of building openings, including doors, windows, floors, and roofs. (3-3.13(b), 3-5.3(b))**
- 2-17.13 Demonstrate the removal of debris, and the removal and routing of water from a structure. (3-3.13(b), 3-5.3(b))**
- 2-17.14 Demonstrate the procedures of inspection, cleaning and maintaining salvage equipment. (3-3.13(b), 3-5.3(b))**

OVERHAUL

- 2-17.15 Identify the purpose of overhaul. (3-3.13, 3-5.3)**
- 2-17.16 Identify the methods used to detect hidden fires. (3-3.7, 3-3.12)**

- 2-17.17 Identify the precautions and procedures to be followed when overhauling. (3-3.7, 3-3.12)
 - 2-17.18 Identify the procedures for restoration of the premises after a fire. (3-3.13)
 - 2-17.19 Identify the duties of firefighters left at the fire scene for fire and security surveillance. (3-3.13)
 - 2-17.20 Identify the procedures to expose hidden fires by opening ceilings, walls, floors, and pulling apart burned materials. (3-3.12, 3-3.13)
 - 2-17.21. Identify the procedures to separate, remove and relocate charred material to a safe location while protecting the area of origin for determination or cause. (3-3.12, 3-3.13)
 - 2-17.22 **Demonstrate exposing hidden fires by opening ceilings, walls, floors, and by pulling apart burned materials. (3-3.12(b))**
 - 2-17.23 **Demonstrate separation, removal, and relocating charred material to a safe location while protecting the area of origin for determination of cause. (3-3.13(b))**
- 2-18 FIRE DETECTION, ALARM AND SUPPRESSION SYSTEMS (3-3.13)**
- 2-18.1 Identify the types of fire alarm systems and their components.
 - 2-18.2 Identify the value of automatic sprinklers in providing safety to the occupants of a structure.
 - 2-18.3 Identify a fire department sprinkler connection and water flow alarm.
 - 2-18.4 Identify the main control valve on an automatic sprinkler system and determine if it is open or closed.
 - 2-18.5 Identify how the automatic sprinkler head activates and releases water.
 - 2-18.6 Identify the components of a hood and duct system and its use.
 - 2-18.7 Identify wet pipe and dry pipe systems and their uses.
 - 2-18.8 Identify the procedures to connect hose-line(s) to a fire department connection of a sprinkler or standpipe system.
 - 2-18.9 Identify the procedure of stopping the flow of water from a sprinkler head using a wedge or stopper.
 - 2-18.10 Identify the procedure of operating a main control valve on an automatic sprinkler system from "open" to "closed" and then back to "open".
 - 2-18.11 Identify the procedures of opening and closing the main drain valve on an automatic sprinkler system.
 - 2-18.12 Identify the procedures of reading and recording the indicated pressures on all gauges provided on a standard wet pipe sprinkler system, and identify each gauge.
 - 2-18.13 Identify the procedures of reading and recording the indicated pressures on all gauges provided on a standard dry pipe automatic sprinkler system and identify each gauge.
 - 2-18.14 **Demonstrate connecting hose line(s) to a fire department connection of a sprinkler or standpipe system.**
 - 2-18.15 **Demonstrate stopping the flow of water from a sprinkler head using a wedge or stopper.**

- 2-18.16 **Demonstrate operating a main control valve on an automatic sprinkler system from “open” to “closed” and then back to “open”.**
- 2-18.17 **Demonstrate opening and closing the main drain valve on an automatic sprinkler system.**
- 2-18.18 **Demonstrate reading and recording the indicated pressures on all gauges provided on a standard wet pipe sprinkler system and identify each gauge.**
- 2-18.19 **Demonstrate reading and recording the indicated pressures on all gauges provided on a standard dry pipe automatic sprinkler system and identify each gauge.**

- 2-19 FIRE PREVENTION AND PUBLIC EDUCATION (3-5)**
 - 2-19.1 Identify five common causes of fires and their prevention.
 - 2-19.2 Identify the importance of inspection and public fire education programs to fire department public relations and the community.
 - 2-19.3 Identify dwelling inspection programs.
 - 2-19.4 Identify the components of a program to instruct citizens how to report a fire or other emergency.
 - 2-19.5 Identify school exit drill procedures.
 - 2-19.6 Identify life safety programs for the home.
 - 2-19.7 Identify common fire hazards and recommendations for their correction.
 - 2-19.8 Identify the components of fire station tours.
 - 2-19.9 Identify the elements of fire safety surveys.
 - 2-19.10 **Demonstrate inspection procedures for private dwellings,**
 - 2-19.11 **Demonstrate, individually or as a group, presenting a prepared public education program to an identified audience for any of the following topics:**
 - 2-19.11.1 **Stop, drop, and roll**
 - 2-19.11.2 **Crawl low in smoke**
 - 2-19.11.3 **Escape planning**
 - 2-19.11.4 **Calling the fire department**
 - 2-19.11.5 **Fire station tours**
 - 2-19.11.6 **Residential smoke detector placement and maintenance.**
 - 2-19.11.7 **Other locally developed programs**
 - 2-19.12 **Demonstrate documenting the presentation of a program covered in 2-19.11, using a reporting form that includes:**
 - 2-19.12.1 **Program title**
 - 2-19.12.2 **Number of participants**
 - 2-19.12.3 **Evaluations**

- 2-20 PROTECTING EVIDENCE FOR CAUSE AND DETERMINATION**
 - 2-20.1 Identify the three factors that can cause a fire. (4-3.4)
 - 2-20.2 Identify the responsibilities of the firefighter in relation to cause and determination. (4-3.4)

- 2-20.3 Identify the role of the fire investigator. (4-3.4)
- 2-20.4 Identify observations the firefighter should make, while responding and working on a fire scene, in relation to cause and determination. (3-3.7, 3-3.12)
- 2-20.5 Identify the firefighter's responsibility, after a fire, in relation to cause and determination. (3-3.7, 3-3.12)
- 2-20.6 Identify the firefighter's role in obtaining statements at the fire scene. (4-3.4)
- 2-20.7 Identify the procedures for securing a fire scene. (3-3.13, 4-3.4)
- 2-20.8 Identify the legal considerations, at the fire scene, in relation to cause and determination. (4-3.4)
- 2-20.9 Identify the procedures for protecting and preserving evidence. (3-3.13)

- 2-21 **COMMUNICATIONS**
 - 2-21.1 Identify the procedures to follow after receiving an alarm from dispatch or a report of an emergency from the public. (3-2.1, 3-2.2, 3-2.3)
 - 2-21.2 Identify the purpose and function of all alarm-receiving instruments and personnel-alerting equipment provided to the department and its members. (3-2.1, 3-2.2, 3-2.3)
 - 2-21.3 Identify local fire department apparatus alarm response orders. (3-2.1)
 - 2-21.4 Identify procedures required for receipt and processing of business and personal calls. (3-2.1, 3-2.2, 3-2.3)
 - 2-21.5 **Demonstrate prescribed fire department radio procedures, including: (3-2.1(b), 3-2.2(b), 3-2.3(b))**
 - 2-21.5.1 **Routine traffic**
 - 2-21.5.2 **Emergency traffic**
 - 2-21.5.3 **Emergency evacuation signals**
 - 2-21.6 **Demonstrate the appropriate action for receiving an alarm from dispatch or a report of an emergency from the public. (3-2.1(b), 3-2.2(b), 3-2.3(b))**
 - 2-21.7 **Demonstrate the operation of the fire station telephone and intercom system. (3-2.1(b), 3-2.2(b), 3-2.3(b))**

- 2-22 **Terrorism Awareness**
 - 2-22.1 Identify the definition of terrorism according to the Federal Bureau of Investigation
 - 2-22.2 Identify the four potential targets of terrorism.
 - 2-22.3 Identify the four categories of potential terrorist activity.
 - 2-22.4 Identify the four types of emergency response involved with a terrorist incident.
 - 2-22.5 Identify the general groupings of warfare agents

- 2-22.6 Identify the three main local/regional agencies or groups which should be notified immediately of a suspected terrorist attack.
- 2-22.7 Identify the process of requesting federal assistance.
- 2-22.8 Identify basic incident priorities for a suspected terrorist attack.

2-23 Firefighter Survival

- 2-23.1 Identify the three main components that lead to incident readiness
- 2-23.2 Identify the four key checks to ensure that PPE is ready for response
- 2-23.3 Identify three types of personal accountability systems
- 2-23.4 Identify personal size up
- 2-23.5 Identify three practices that lead to team continuity
- 2-23.6 Identify risk/benefit
- 2-23.7 Identify the three components of rehabilitation
- 2-23.8 Identify the procedures that should be taken to establish and prepare for the assignment of a rapid intervention team
- 2-23.9 Identify the five steps that can lead to an organized rapid escape
- 2-23.10 Identify the three steps that should be taken when entrapment occurs
- 2-23.11 Identify the terms "post incident thought patterns" and "critical incident stress"